

Au	30	7440-57-5
Ag	24	7440-22-4
V	12	7440-62-2
Cu	10	7440-50-8
Pt	8	7440-06-4
In	7	7440-74-6
Mn	3	7439-96-5
Ni	3	7440-02-0
Bi	2	7440-69-9

IC C22C009-00

CC 56-9 (Nonferrous Metals and Alloys)

Section cross-reference(s): 57

IT 55385-17-4

RU: USES (Uses)

(metalization with, of cubic boron nitride)

L36 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976178308 HCAPLUS Full-text

DOCUMENT NUMBER: 84:78308

ORIGINAL REFERENCE NO.: 84:12829a,12832a

TITLE: Platinum alloy

INVENTOR(S): Savitskii, E. M.; Polyakova, V. P.; Gorina, N. B.; Voronova, L. I.

PATENT ASSIGNEE(S): Buikov, A. A., Institute of Metallurgy, USSR

SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom.

Obraztay, Tovarnye Znaki 1975, 52(35), 75.

CODEN: URXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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SU 485165	A1	19750925	SU 1974-2019612	197404

PRIORITY APPLN. INFO.:	DATE	TYPE	DATE
SU 1974-2019612	197404	A	197404
	26		26

AB Addition of In or Al to a Pt alloy increases hardness and extends the color range. The Pt alloy contains In or Al 40.0-65.0, Pb 0.5-1.0, and Fe 0.2-0.8 weight%.

IT 55385-17-4

RU: USES (Uses)

(coloring and hardening of)

RN 55385-17-4 HCAPLUS

CN Indium alloy, base, In 40-65,Pt 33-59,Pb 0.5-1,Fe 0.2-0.8 (9CI) (CA INDEX NAME)

Component	Component	Component	
Percent	Percent	Registry Number	
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In	40	65	7440-74-6
Pt	33	59	7440-06-4
Pb	0.5	1	7439-92-1
Fe	0.2	0.8	7439-89-6

IC C22C  
 CC 56-2 (Nonferrous Metals and Alloys)  
 IT 58385-16-3 58385-17-4  
 RU: USFS (Uses)  
 (coloring and hardening of)

L36 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972465564 HCAPLUS Full-text  
 DOCUMENT NUMBER: 77:65564  
 ORIGINAL REFERENCE NO.: 77:10811a,10814a  
 TITLE: Gold-base alloys for use in dentistry and  
 industry  
 INVENTOR(S): Burnett, Arthur Peter  
 PATENT ASSIGNEE(S): Ney, J. M., Co.  
 SOURCE: U.S., 2 pp.  
 CODEN: USXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3666540	A	19720530	US 1967-656048	196707 26
PRIORITY APPLN. INFO.:			US 1967-656048	A 196707 26

AB A Au alloy of good corrosion resistance, high solidus temperature, satisfactory hardness, and good casting properties is provided for dental purposes. The alloy contains Au 78-85, Pd 8-13, Pt 4-8, Fe 0.7-1.0, Sn 0.9-1.4, and Re 0.07-0.28. The addition of Re provides grain refining, while the addition of Ag (up to 2), Zn (up to 1.5) and In (up to 1%) promotes fluidity. The hardness of the alloy can be developed by air-cooling from >980° to 100-150° at a rate of 80-130°/min. Age hardening of the alloy is done at 530-45° for 15-30 min and for optimum results the Fe:Pt ratio should be kept at 0.4-0.6:1. Thus, a cast Au alloy having a solidus temperature of 1173° and a thermal linear expansion coefficient of 1.4 + 10-5 degree-1 was made by casting an alloy composition containing Au 81.0, Pd 8.3, Pt 2.2, Fe 0.6, Sn 2.2, and Re 0.1% in a phosphate bonded investment mold. The alloy was air-cooled from 926°. After age hardening the ultimate tensile strength of the alloy was 90,000 psi.

IT 37200-84-3  
 RU: USFS (Uses)  
 (for dentistry)  
 RN 37200-84-3 HCAPLUS  
 CN Gold alloy, base, Au 78-85, Pd 8-13, Pt 4-8, Ag 0-2, Zn 0-1.5, Sn 0.9-1.4, Fe 0.7-1, In 0-1, Re 0.1-0.2 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	78	85 7440-57-5
Pd	8	13 7440-05-3
Pt	4	8 7440-06-4
Ag	0	2 7440-22-4